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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,989	11/10/2000	Giorgos C. Zacharia	O0220/7002/SJH/DPM	4272

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EXAMINER

STIMPAK, JOHNNA

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/709,989

Applicant(s)

ZACHARIA, GIORGOS C.

Examiner

Johnna R Stimpak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-12, 15-22 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 4,5,13,14,23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a Non-Final Office Action upon examination of application number 09/709,989. Claims 1-21 are pending and have been examined on the merits discussed below.

Response to Arguments

2. Applicant's arguments, see page 15, filed December 19, 2003, with respect to the rejection(s) of claim(s) 1 and 10 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Aggarwal et al.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-3, 6 and 10-12, 15-22 and 25** are rejected under 35 U.S.C. 103(a) as being Unpatentable over Zacharia et al in view of Aggarwal et al, US 6,487,541.

As per **claim 1**, Zacharia et al teaches a method of determining a personalized ratee reputation of a first entity from the perspective of a second entity associated with the first entity by one or more rating paths, wherein a rating path comprises one or more rating links, each rating link defining a rating of a rated entity provided by a rating entity, wherein each rating path has a length defined as a number of rating links comprised in the path, and each entity comprised

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on one of the rating paths has a level defined as a number of rating links between the entity and the second entity, the method comprising steps of: (A) performing a breadth-first search beginning at the second entity to determine, from the one or more rating paths, one or more first rating paths (pg 5, 1st column – refer to highlighted portion, part a); (B) for each determined first rating path, identifying a third entity on the first rating path that has a level equal to one less than the first length (pg 5, 1st column – refer to highlighted portion, part b, in identifying another entity, the path must be at most $N-1$, so the length is one less than the first length); (C) for each identified third entity, determining a first rating of the first entity provided by the third entity; (D) combining the first ratings; and (E) producing the personalized ratee reputation by weighting the combined first ratings by an amount according to the first length (pg 5, column 2, equation 2 – the reputation calculation involves combining the first (t) ratings and weighting the ratings by the length, θ or m).

Zacharia et al does not explicitly teach the paths between the first and second entity having a first length equal to a shortest length between the first entity and the second entity. Aggarwal et al teaches searching for the shortest path between raters using a variety of graph search algorithms such as a breadth first search. Since both Zacharia et al and Aggarwal et al both teach evaluating ratings from a group of raters connected by a path using breadth first searching algorithm, it would have been obvious to one of ordinary skill at the time of the invention to use Zacharia et al's breadth first search technique to determine a rating path and include Aggarwal et al's idea of using the shortest path to ensure the rating of the first entity comes directly from the second entity.

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As per **claim 2**, teaches step (D) comprises calculating an average of the first ratings pg 5, column 2, equation 2 – the reputation calculation involves combining the first (t) ratings and weighting the ratings by the length, θ or m, then dividing by the total number of ratings).

As per **claim 3**, teaches calculating the average comprises, for each first rating, weighting the first rating as a function of a personalized ratee reputation of the corresponding third entity from the perspective of the second entity, the weighting being relative to personalized ratee reputations of the other third entities from the perspective of the second entity (pg 5, column 1, part b – the reputation value of a user is evaluated taking into account all the ratings of the users at the last node of the path before the user being evaluated).

As per **claim 6**, teaches (F) for each identified third entity, determining if the third entity has provided more than one rating of the first entity; and (G) for each third entity determined to have provided more than one rating of the first entity, selecting a most recent rating of the more than one ratings as the first rating of the first entity provided by the third entity (pg 5, column 1, part a, only interested in the most recent θ paths with respect to the chronological order of the ratings).

As per **claims 10-12 and 15-18**, they are the system of modules for performing the method of claims 1-9, respectively. Therefore the rejection applied to claims 1-10 also applies to claims 10-18.

As per **claim 19**, it is the system with means for performing the method of claim 1. Therefore, the rejection applied to claim 1 also applies to claim 19.

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As per **claims 20-22 and 25**, they are the computer program product comprising computer readable medium with instructions to perform claims 1-6. Therefore, the rejections applied to claims 1-6 also apply to claims 20-25.

5. **Claims 7-9 and 26-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Zacharia et al, in view of Aggarwal et al, in further view of Moukas et al.

As per **claims 7 and 26**, Zacharia et al and Aggarwal et al teach all the limitation of claim 8 as applied to claim 1 above, but do not teach determining whether to transact with the first entity based on the determined ratee reputation of the first entity. Moukas et al teaches a selling agent that knows what expertise an entity has and can compare different entities offering the expertise. Moukas et al specifically uses the reputation of the entity to decide whether to transact with the entity (p14). Since Zacharia et al, Aggarwal et al and Moukas et al involve calculations that combine ratings, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the reputation generating method of Zacharia et al and Aggarwal et al with the Moukas et al method of determining whether to transact with an entity to make, for example, an online shopping experience more efficient, realistic and trustworthy as suggested by Moukas et al.

As per **claims 8 and 27**, Zacharia et al and Aggarwal et al teach all the limitations of claim 9 as applied to claim 1 above, but do not teach determining a price to pay for a good or service offered by the first entity based on the determined ratee reputation of the first entity. Moukas et al teaches a selling agent that knows what expertise an entity has and can compare different entities offering the expertise. Moukas et al specifically teaches the reputation of the

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entity being a significant factor of the price level negotiation (p14). Since Zacharia et al, Aggarwal et al and Moukas et al involve calculations that combine ratings, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the reputation generating method of Zacharia et al and Aggarwal et al with the Moukas et al method of determining a price to pay for a good or service offered by the first entity based on the determined ratee reputation to make, for example, an online shopping experience more efficient, realistic and trustworthy as suggested by Moukas et al.

As per **claims 9 and 28**, Zacharia et al and Aggarwal et al teach all the limitations of claim 10 as applied to claim 1 above, but do not teach determining a price to pay for insuring a quality of a good or service offered by the first entity based on the determined ratee reputation of the first entity. Moukas et al teaches a selling agent that knows what expertise an entity has and can compare different entities offering the expertise. Moukas et al specifically teaches the reputation of the entity being a factor of merchant differentiation in retail sales negotiation (p12 – Tete-a-Tete). Moukas et al teaches a negotiation system that provides way for merchants to differentiate themselves in product and service attributes such as warranty length and options, service contracts, payment options, etc (p12 – Tete-a-Tete). All of which are elements of insuring quality of a product. Since Zacharia et al, Aggarwal et al and Moukas et al involve calculations that combine ratings, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the reputation generating method of Zacharia et al and Aggarwal et al with the Moukas et al method of determining a price to pay for a good or service offered by the first entity based on the determined ratee reputation to make, for example, an

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online shopping experience more efficient, realistic and trustworthy as suggested by Moukas et al.

Allowable Subject Matter

6. **Claims 4, 5, 13, 14, 23 and 24** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnna R Stimpak whose telephone number is 703-305-4566. The examiner can normally be reached on M-F 8am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Js

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March 19, 2004



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